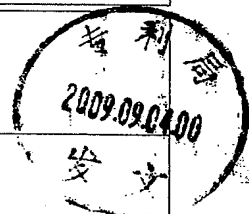




# 中华人民共和国国家知识产权局

100083 北京市海淀区王庄路1号清华同方科技大厦B座25层 中科专利商标代理有限公司 王玮	发文日
申请号: 038221314	
申请人: 株式会社 NTT 都科摩	
发明名称: 电子通信系统、装置和电极铺设方法	



## 第一次审查意见通知书

(进入国家阶段的 PCT 申请)

- ☒ 应申请人提出的实审请求, 根据专利法第 35 条第 1 款的规定, 国家知识产权局对上述发明专利申请进行实质审查。  
☐ 根据专利法第 35 条第 2 款的规定, 国家知识产权局决定自行对上述发明专利申请进行审查。
- ☒ 申请人要求以在:  
JP 专利局的申请日 2002 年 07 月 18 日为优先权日,  
JP 专利局的申请日 2002 年 07 月 18 日为优先权日,  
JP 专利局的申请日 2002 年 07 月 18 日为优先权日。
- ☐ 申请人于 年 月 日和 年 月 日以及 年 月 日提交了修改文件。  
经审查, 申请人于 年 月 日提交的 不符合专利法实施细则第 51 条第 1 款的规定。  
☐
- ☒ 审查是针对原始提交的国际申请的中文译文进行的。  
☐ 审查是针对下述申请文件进行的:  
☐ 说明书 第 页, 按照进入中国国家阶段时提交的国际申请文件的中文文本;  
第 页, 按照专利性国际初步报告附件的中文文本;  
第 页, 按照依据专利合作条约第 28 条或 41 条规定所提交的修改文件;  
第 页, 按照依据专利法实施细则第 51 条第 1 款规定所提交的修改文件;  
第 页, 按照 年 月 日所提交的修改文件。  
☐  
☐ 权利要求 第 项, 按照进入中国国家阶段时提交的国际申请文件的中文文本;  
第 项, 按照依据专利合作条约第 19 条规定所提交的修改文件的中文文本;  
第 项, 按照专利性国际初步报告附件的中文文本;  
第 项, 按照依据专利合作条约第 28 条或 41 条规定所提交的修改文件;  
第 项, 按照依据专利法实施细则第 51 条第 1 款规定所提交的修改文件;  
第 项, 按照 年 月 日所提交的修改文件。  
☐  
☐ 附图 第 页, 按照进入中国国家阶段时提交的国际申请文件的中文文本;  
第 页, 按照专利性国际初步报告附件的中文文本;  
第 页, 按照依据专利合作条约第 28 条或 41 条规定所提交的修改文件;  
第 页, 按照依据专利法实施细则第 51 条第 1 款规定所提交的修改文件;  
第 页, 按照 年 月 日所提交的修改文件。



☐

☒ 本通知书引用下述对比文件(其编号在今后的审查过程中继续沿用):

编号	文件号或名称	公开日期 (或抵触申请的申请日)
1	JP10229357A	1998-8-25
2	JP2001352299A	2001-12-21

5. 审查的结论性意见:

☒ 关于说明书:

- ☐ 申请的内容属于专利法第 5 条规定的不授予专利权的范围。
- ☐ 说明书不符合专利法第 26 条第 3 款的规定。
- ☐ 说明书不符合专利法第 33 条的规定。
- ☒ 说明书的撰写不符合专利法实施细则第 18 条的规定。

☒ 关于权利要求书:

- ☐ 权利要求 不具备专利法第 22 条第 2 款规定的新颖性。
- ☒ 权利要求 14-17, 20, 24, 25 不具备专利法第 22 条第 3 款规定的创造性。
- ☐ 权利要求 不具备专利法第 22 条第 4 款规定的实用性。
- ☐ 权利要求 属于专利法第 25 条规定的不授予专利权的范围。
- ☒ 权利要求 1, 9, 21 不符合专利法第 26 条第 4 款的规定。
- ☐ 权利要求 不符合专利法第 31 条第 1 款的规定。
- ☐ 权利要求 不符合专利法第 33 条的规定。
- ☐ 权利要求 不符合专利法实施细则第 2 条第 1 款的规定。
- ☐ 权利要求 不符合专利法实施细则第 13 条第 1 款的规定。
- ☒ 权利要求 1, 7, 11, 12, 14, 18, 19, 22 不符合专利法实施细则第 20 条的规定。
- ☐ 权利要求 不符合专利法实施细则第 21 条的规定。
- ☐ 权利要求 不符合专利法实施细则第 22 条的规定。
- ☐ 权利要求 不符合专利法实施细则第 23 条的规定。

☐ 分案的申请不符合专利法实施细则第 43 条第 1 款的规定。

上述结论性意见的具体分析见本通知书的正文部分。

6. 基于上述结论性意见, 审查员认为:

- ☐ 申请人应按照通知书正文部分提出的要求, 对申请文件进行修改。
- ☒ 申请人应在意见陈述书中论述其专利申请可以被授予专利权的理由, 并对通知书正文部分中指出的不符合规定之处进行修改, 否则将不能授予专利权。
- ☐ 专利申请中没有可以被授予专利权的实质性内容, 如果申请人没有陈述理由或者陈述理由不充分, 其申请将被驳回。

7. 申请人应注意下述事项:

- (1) 根据专利法第 37 条的规定, 申请人应在收到本通知书之日起的肆个月内陈述意见, 如果申请人无正当理由逾期不答复, 其申请将被视为撤回。
- (2) 申请人对其申请的修改应符合专利法第 33 条的规定, 修改文本应一式两份, 其格式应符合审查指南的有关规定。
- (3) 申请人的意见陈述书和 / 或修改文本应邮寄或递交国家知识产权局专利局受理处, 凡未邮寄或递交给受理处的文件不具备法律效力。
- (4) 未经预约, 申请人和 / 或代理人不得前来国家知识产权局专利局与审查员举行会晤。

8. 本通知书正文部分共有 4 页, 并附有下列附件:

☐ 引用的对比文件的复印件共      份      页。

☐

审查员: 申砾(3341)



审查部门

通信审查部



## 第一次审查意见通知书正文

申请号：038221314

本申请涉及一种电场通信系统及电场通信装置。经审查，现提出如下的审查意见。

1. 权利要求14不具备专利法第二十二条第三款规定的创造性。对比文件1

(JP10229357A)公开了一种电场通信装置，并具体公开了以下的技术特征：其包括配备在容易接受来自电介体的电效应的位置的接收机主电极RXB1，与发射机返回电极建立静电耦合的接收机返回电极RXG1，测量在接收机主电极RXB1和接收机返回电极RXG1之间产生的电状态的测量部件（参见对比文件1的说明书第24-46段、图1-3）；该权利要求与对比文件1的区别在于：测量部件包括电光晶体、光发射装置、和光接收装置。上述区别特征已被对比文件2（JP2001352299A）公开：接收装置中包括根据电场来调制光的电光晶体27，向电光晶体27发射光的光发射装置31，和根据接收到的渗透到电光晶体27中的光来输出信号的光接收装置29（参见对比文件2的说明书第25-34段、图1-3），对比文件2的技术领域与本申请的技术领域相同，而且该特征在对比文件2中所起的作用与其在本发明中为解决其技术问题所起的作用相同，都是用于利用电光晶体和光检测器来形成电场传感器以检测电场获得信号，也就是说对比文件2给出了将该技术特征用于该对比文件1以解决其技术问题的启示，进而使得本领域的技术人员有动机将对比文件2和对比文件1结合起来构成该权利要求的技术方案。由此可知，在对比文件1的基础上结合对比文件2得出该权利要求所要求保护的技术方案，对本领域的技术人员来说是显而易见的，因此权利要求14不具有突出的实质性特点和显著的进步，因而不具备创造性。

2. 权利要求15不具备专利法第二十二条第三款规定的创造性。该从属权利要求限定部分的附加技术特征也已在对比文件1中公开：接收机返回电极RXG位于远离电介质并且面向电介体的位置（参见对比文件1的图23, 24），且其在该对比文件中所起的作用与其在本发明中所起的作用相同，都是用于便于使用者进行通信并提高通信质量。因此，在其引用的权利要求不具备创造性的情况下，该从属权利要求也不具有突出的实质性特点和显著的进步，因而不具备创造性。

3. 权利要求16、17不具备专利法第二十二条第三款规定的创造性。上述从属权利要求限定部分的附加技术特征是所属技术领域中的公知常识，根据使用需求本领域技术人员容易想到将电场传感器中使用的电光晶体放置在适当的位置以便于检测。因

此，在其引用的权利要求不具备创造性的情况下，上述从属权利要求也不具有突出的实质性特点和显著的进步，因而不具备创造性。

4. 权利要求20不具备专利法第二十二条第三款规定的创造性。对比文件1公开了：接收机返回电机RXG1配备在电场通信期间其不接触电介体的位置（参见对比文件1的说明书第36段、图1）；而将电场通信装置中的测量部件配备于一绝缘体中，以及将接收机主电极配备在绝缘体的表面上以便于通信，这是本领域的常用技术手段，属于公知常识。因此，在其引用的权利要求不具备创造性的情况下，该从属权利要求也不具有突出的实质性特点和显著的进步，因而不具备创造性。

5. 权利要求24、25不具备专利法第二十二条第三款规定的创造性。对比文件1公开了：电场通信装置包括根据测量部件的测量结果获得电信号，并通过解调电信号获得发射数据的解调器DMD1（参见对比文件1的说明书第36-39段、图2）；而在解调器中设置用于存储所接收的数据包的临时存储器以当解调失败时可重新进行解调，以及在解调时先判断接收数据的极性继而相应地进行后续的解调步骤以获得解调信号，都是本领域的常用技术手段，属于公知常识。因此，在其引用的权利要求不具备创造性的情况下，上述从属权利要求也不具有突出的实质性特点和显著的进步，因而不具备创造性。

6. 权利要求1不符合专利法第二十六条第四款的规定。该权利要求中的技术特征“根据所述电信号调制所述发射机主电极和所述接收机返回电极之间电压差的调制器”并未记载在说明书中，并且所属技术领域的技术人员也无法从说明书充分公开的内容中得到或概括得出该技术方案。因此，权利要求1没有以说明书为依据，不符合专利法第二十六条第四款的规定。

7. 权利要求9不符合专利法第二十六条第四款的规定。该从属权利要求限定部分的附加技术特征在说明书中没有记载，并且所属技术领域的技术人员也无法从说明书充分公开的内容中得到或概括得出该技术方案。因此，权利要求9没有以说明书为依据，不符合专利法第二十六条第四款的规定。

8. 权利要求21不符合专利法第二十六条第四款的规定。该权利要求中的技术特征“根据所发射的数据改变所述发射机主电极和所述发射机返回电极之间的电压差的调制器，所述调制器根据对应用来通知出现所述电场通信装置的通知信息的电信号来改变电压差”并未记载在说明书中，并且所属技术领域的技术人员也无法从说明书充分公开的内容中得到或概括得出该技术方案。因此，权利要求21没有以说明书为依据，不符合专利法第二十六条第四款的规定。

9. 权利要求1、12、14、22不符合专利法实施细则第二十条第一款的规定。权利要求1第6行中“所述接收机返回电极”、权利要求12第2行中“所述接收装置”、权利要求14中“所述电介质”“所述发射机返回电极”、权利要求22第2行中“所述发射机装置”“所述发射机主电极”、第4行中“所述通知信息”缺乏引用基础，因而导致上述权利要求的保护范围不清楚。

10. 权利要求7不符合专利法实施细则第二十条第一款的规定。该权利要求所引用的权利要求1中出现了“发射机主电极”“发射机返回电极”“接收机主电极”“接收机返回电极”，因而权利要求7中“所述一个电极”指代不清，导致该权利要求的保护范围不清楚。

11. 权利要求11不符合专利法实施细则第二十条第一款的规定。该权利要求中“所述接收机主电极配备在所述接收机主电极不接触所述发射机主电极和所述接收机主电极的位置”逻辑关系不清楚，无法理解接收机主电极如何不接触接收机主电极，导致该权利要求的保护范围不清楚。另外，该权利要求在非结尾处使用了句号（第3行行尾），请申请人对此进行修改。

12. 权利要求12不符合专利法实施细则第二十条第一款的规定。该权利要求中“所述目标电极和所述返回电极可以穿过所述电光晶体彼此相对位置”表述上语句不通顺，语意不清楚，导致该权利要求的保护范围不清楚。

13. 权利要求18、19不符合专利法实施细则第二十条第一款的规定。上述权利要求中“所述测量部件位于比所述接收机返回电极更接近所述电光晶体的位置”逻辑关系不清楚，其所引用的权利要求14中限定了“测量部件包括电光晶体”，无法理解包括电光晶体的测量部件如何位于接近所述电光晶体的位置，导致上述权利要求的保护范围不清楚。

14. 发明的名称应当清楚、简要、全面地反映要求保护的发明的主题和类型，本申请的发明名称“电子通信系统、装置和电极铺设方法”不符合上述规定，因而不符合专利法实施细则第十八条第一款的规定。

申请人应在本通知书指定的答复期限内作出答复，对本通知书中提出的所有问题逐一详细地作出说明，并根据本通知书的意见对专利申请文件作出修改，尤其是应根据本通知书中引用的对比文件修改独立权利要求以及相应的从属权利要求，并在意见陈述书中论述新修改的独立权利要求相对于本通知书中引用的对比文件以及原说明书中提到的申请日前的现有技术具有新颖性和创造性的理由。此外，说明书应根据修

改后的权利要求书作适应性修改。申请人对申请文件的修改应当符合专利法第三十三条的规定，不得超出原说明书和权利要求书的记载范围。

审查员：申砾

代码：3341

# State Intellectual Property Office of People's Republic of China

<b>ZIP CODE: 100083</b> <b>25/F., Bldg.B, Tsinghua Tongfang Hi-Tech Plaza,</b> <b>No.1, Wangzhuang Rd.,</b> <b>Haidian District, Beijing , P. R. China</b>	<b>Issuing Date:</b> September 4, 2009
<b>Patent Agent: Wei WANG</b>	
<b>Application No. 03822131.4</b>	
<b>Applicant: NTT DoCoMo, Inc.</b>	
<b>Title of Invention: Electric-Field Communication System, Electric-Filed Communication Device, and Electrode Disposing Method</b>	

## FIRST OFFICE ACTION

(For PCT Application Entering the National Phase)

1. ☒ The applicant filed a request for substantive examination. The examiner has carried out substantive examination on the above mentioned application in accordance with the provisions of Article 35(1) of the Chinese Patent Law.  
☐ The Patent Office has decided to carry out substantive examination on the above mentioned application in accordance with the provisions of Article 35(2) of the Chinese Patent Law.
2. ☒ The applicant claimed:  
the filing date 2002.7.18 in the Japan Patent Office as the priority date,  
the filing date 2002.7.18 in the Japan Patent Office as the priority date,  
the filing date 2002.7.18 in the Japan Patent Office as the priority date,  
the filing date \_\_\_\_\_ in the \_\_\_\_\_ Patent Office as the priority date,  
the filing date \_\_\_\_\_ in the \_\_\_\_\_ Patent Office as the priority date.
3. ☐ The applicant submitted amendment(s) to the application on \_\_\_\_\_ and on \_\_\_\_\_, wherein, the amendment(s) submitted on \_\_\_\_\_ is not in conformity with the provisions of Rule 51 of the Implementing Regulations of the Chinese Patent Law.
4. ☒ The examination was carried out based on the Chinese translation of the international application as originally filed.  
☐ The examination was carried out on the basis of the following application documents:  
☐ The description  
Pages \_\_\_\_\_, the Chinese translation of the international application as filed entering national phase;  
Pages \_\_\_\_\_, the Chinese translation of the annexes to the International Preliminary Examination Report;  
Pages \_\_\_\_\_, the Chinese translation of the amendment submitted under Article 28 or 41 of the Patent Cooperation Treaty;  
Pages \_\_\_\_\_, amendment submitted according to Rule 51(1) of the Implementing Regulations of the Chinese Patent Law;  
Pages \_\_\_\_\_, the amendment(s) submitted on \_\_\_\_\_.  
☐ The claims  
Nos. \_\_\_\_\_, the Chinese translation of the international application as filed when entering national phase;  
Nos. \_\_\_\_\_, the Chinese translation of the amendment submitted under Article 19 of the Patent Cooperation Treaty.  
Nos. \_\_\_\_\_, the Chinese translation of the annexes to the International Preliminary Examination Report;  
Nos. \_\_\_\_\_, the Chinese translation of the amendment submitted under Article 28 or 41 of the Patent

Cooperation Treaty;

Nos. \_\_\_\_\_, amendment submitted according to Rule 51(1) of the Implementing Regulations of the Chinese Patent Law.

Nos. \_\_\_\_\_, amendment submitted on \_\_\_\_\_.

☐ The drawings

Pages \_\_\_\_\_, the Chinese translation of the international application as filed when entering national phase;

Pages \_\_\_\_\_, the Chinese translation of the annexes to the International Preliminary Examination Report;

Pages \_\_\_\_\_, the Chinese translation of the amendment submitted under Article 28 or 41 of the Patent Cooperation Treaty;

Pages \_\_\_\_\_, amendment submitted according to Rule 51(1) of the Implementing Regulations of the Chinese Patent Law.

Pages \_\_\_\_\_, the amendment(s) submitted on \_\_\_\_\_.

☐ The abstract

The Chinese translation of the international application as filed when entering national phase.

☐ The drawings of abstract

The Chinese translation of the amendment submitted under Article 28 or 41 of the Patent Cooperation Treaty;

☒ The following reference documents have been cited in this office action (their serial numbers will be referred to in the ensuing examination procedure):

Serial No.	Reference document( Number or Title)	Publication Date (or Filing date of interference patent applications)
1	<b>JP10229357A</b>	<b>25 day 08 month 1998 year</b>
2	<b>JP2001352299A</b>	<b>21 day 12 month 2001 year</b>
3		day month year
4		day month year

5. The result of the examination is as follows:

☒ Description:

☐ The subject matter of the application falls into the scope on which no patent right shall be granted as provided by Article 5 of the Chinese Patent Law.

☐ The description is not in conformity with the provisions of Article 26(3) of the Chinese Patent Law.

☐ The description is not in conformity with the provisions of Article 33 of the Chinese Patent Law

☒ The description is not in conformity with the provisions of Rule 18 of the Implementing Regulations of the Chinese Patent Law.

☒ Claims:

☐ Claim \_\_\_\_\_ does not possess novelty as provided by Article 22(2) of the Chinese Patent Law.

☒ Claim **14-17,20,24,25** does not possess inventiveness as provided by Article 22(3) of the Chinese Patent Law.

☐ Claim \_\_\_\_\_ does not possess practical applicability as provided by Article 22(4) of the Chinese Patent Law.

☐ Claim \_\_\_\_\_ falls into the scope, on which no patent rights shall be granted, as provided by Article 25 of the Chinese Patent Law.

☒ Claim **1,9,21** is not in conformity with the provisions of Article 26(4) of the Chinese Patent Law.

☐ Claim \_\_\_\_\_ is not in conformity with the provisions of Article 31(1) of the Chinese Patent Law.

☐ Claim \_\_\_\_\_ is not in conformity with the provisions of Article 33 of the Chinese Patent Law:

☐ Claim \_\_\_\_\_ is not in conformity with the provisions of Rule 2(1) of the Implementing Regulations of the Chinese Patent Law

☐ Claim \_\_\_\_\_ is not in conformity with the provisions of Rule 13(1) of the Implementing Regulations of



the Chinese Patent Law.

- ☒ Claim 1,7,11,12,14,18,19,22 is not in conformity with the provisions of Rule 20 of the Implementing Regulations of the Chinese Patent Law.
- ☐ Claim \_\_\_\_\_ is not in conformity with the provisions of Rule 21 of the Implementing Regulations of the Chinese Patent Law.
- ☐ Claim \_\_\_\_\_ is not in conformity with the provisions of Rule 22 of the Implementing Regulations of the Chinese Patent Law.
- ☐ Claim \_\_\_\_\_ is not in conformity with the provisions of Rule 23 of the Implementing Regulations of the Chinese Patent Law.

- ☐ The divisional application is not in conformity with the provisions of Rule 43(1) of the Implementing Regulations of the Chinese Patent Law.

The detail analysis for above conclusive opinion is described in the text of this office action.

6. On the basis of the above conclusive opinion, the examiner holds that:

- ☐ The applicant should make amendments as required in the text of this office action.
- ☒ The applicant should provide reasons for that the above mentioned patent application can be granted the patent right, and make amendments to the specification which is not in conformity with the provisions as described in text of this office action; otherwise the patent right shall not be granted.
- ☐ The patent application does not possess any substantive patentable contents, if the applicant fails to provide reasons or the reasons provided are not sufficient, this application will be rejected.
- ☐

7. The applicant's attention is drawn to the following matters:

- (1) In accordance with the provisions of Article 37 of the Chinese Patent Law, the applicant shall submit a response within four months from the receipt of this office action. If the applicant fails to meet the time limit without any justified reason, the application shall be deemed withdrawn.
- (2) The amendment made by the applicant shall be in conformity with the provisions of Article 33 of the Chinese Patent Law. The amended documents shall be submitted in duplicate and in the format required by the relevant provisions of the Examination Guideline.
- (3) The applicant's response and/or amended documents shall be mailed or submitted to the Receiving Department of the Chinese Patent Office. Documents which are not mailed or not submitted to the Receiving Department do not possess legal effect.
- (4) The applicant and/or his (its) agent shall not come to the Chinese Patent Office for interview with the examiner without an appointment.

8. The text of this office action consists of a total of 4 sheets, and is accompanied by the following annexes:

- ☐ A copy of cited reference documents consisting of \_\_\_\_\_ sets and \_\_\_\_\_ sheets.

☐

The \_\_\_\_\_ Examination Department

The Seal of the Examiner: Li SHEN

## DETAILED FIRST OFFICE ACTION

Application Number: 03822131.4

The application relates to an electric field communications system and an electric field communications apparatus. After examination, the Examiner is of the opinions as follows:

1. Claim 14 is rejected under Article 22(3) of the Chinese Patent Law.

Reference 1 (JP10229357A) discloses an electric field communications apparatus, and in particular discloses the following contents (see paragraphs 24-46 and Figs.1-3 of Reference 1):

*The apparatus comprises a receiver main electrode RXB1 provided in a location where said receiver main electrode is readily subject to an electric effect from said dielectric; a receiver return electrode TXG1 that establishes an electrostatic coupling with said transmitter return electrode; and a measuring part that measures an electric status generated between said receiver main electrode RXB1 and said receiver return electrode RXG1.*

Consequently, Claim 14 differs from Reference 1 in that the measuring parts comprises an electro-optical crystal, light emitting means and light receiving means.

The above distinguished technical feature has been disclosed in Reference 2 (JP2001352299A). According to paragraphs 25-34 and Figs. 1-3 of Reference 2, *the receiving apparatus comprises an electro-optical crystal 27 that modulates light in response to an electric field, light emitting means 31 that emits light to said electro-optical crystal 27; and light receiving means 29 that outputs signals in response to the received light penetrating said electro-optical crystal 27.*

Consequently, Reference 2 falls into the same technical field with the present application, and the technical effect achieved by the technical feature in Reference 2 is the same with that in the present application, i.e. to form an electric field sensor using an electro-optical crystal and a light detector DT so as to detect an electric field and obtain signals. That is, Reference 2 has given an inspiration of applying the technical feature in Reference 1 to solve its technical problem, and further gives those skilled in the art some motivation to combine Reference 2 with Reference 1 to get the technical solution of Reference 1. Therefore, it is obvious for those skilled in the art to get the technical solution of Claim 14 by combining Reference 1 with Reference 2. Accordingly, Claim 14 neither has prominent substantive features nor represents a notable progress, and is thus lack of inventive step.

**Article 22(3) of the Chinese Patent Law:**

***Inventiveness means that, as compared with the technology existing before the date of filing, the invention has prominent substantive features and represents a notable progress and that the utility model has substantive features and represents progress.***

**2. Claim 15 is rejected under Article 22(3) of Chinese Patent Law.**

The additional technical feature of Claim 15 has been disclosed in Reference 1. Specifically, Reference 1 discloses that said receiver return electrode RXG is positioned far from said dielectric and faces to said dielectric in Figs. 23 and 24 of Reference 1. Also, the technical effect achieved by the technical feature in Reference 1 is the same with that in the present invention, i.e. to facilitate users' communication and to improve communication qualities. Accordingly, Claim 15 neither has prominent substantive features nor represents a notable progress, and is thus lack of inventive step.

**3. Claims 16 and 17 are rejected under Article 22(3) of Chinese Patent Law.**

The additional technical features of Claims 16 and 17 belong to the common senses in the art, and it is conceivable for those skilled in the art to appropriately locate an electro-optical crystal used in an electric field sensor as required, so as to facilitate detection. Accordingly, Claims 16 and 17 neither have prominent substantive features nor represent notable progresses, and are thus lack of inventive step.

**4. Claim 20 is rejected under Article 22(3) of Chinese Patent Law.**

Reference 1 discloses the receiver return electrode RXG1 is provided in a location where said receiver return electrode cannot contact said dielectric during electric field communications (see paragraph 36 and Fig. 1 of Reference 1). On the other hand, providing the measuring part of the electric field communications apparatus in an insulator and providing the receiver main electrode on the upper face of the insulator to facilitate communications both belong to the common senses in the art. Accordingly, Claim 20 neither has prominent substantive features nor represents a notable progress, and is thus lack of inventive step.

**5. Claims 24 and 25 are rejected under Article 22(3) of Chinese Patent Law.**

Reference 1 discloses the electric field communications apparatus comprises a demodulator DMD1 that acquires electric signal based on the measurement result by said measuring part, and acquires the transmitted data by demodulating the electric signal (see

paragraphs 36-39 and Fig. 2 of Reference 1). On the other hand, it is the common senses for those skilled in the art to set a temporary memory for storing a received packet in the demodulator, so as to perform a re-demodulation when the demodulator fails to demodulate the packet, and it is well-known for those skilled in the art to firstly determine the polarity of the received data and then correspondingly perform successive demodulation steps, so as to obtain demodulated signals. Accordingly, Claims 24 and 25 neither have prominent substantive features nor represent notable progresses, and are thus lack of inventive step.

6. Claim 1 is rejected under Article 26(4) of the Chinese Patent Law.

The technical feature "a modulator that modulates a voltage difference between said transmitter main electrode and said transmitter return electrode in response to said electric signal" appearing in Claim 1 is not recited in the description, and those skilled in the art can not get or generalize the technical solution of Claim 1 from the contents fully disclosed in the description. Accordingly, Claim 1 can not be supported by the description, and does not comply with the requirements of Article 26(4) of the Chinese Patent Law.

***Article 26(4) of the Chinese Patent Law: The claims shall be supported by the description and shall state the extent of the patent protection asked for.***

7. Claim 9 is rejected under Article 26(4) of the Chinese Patent Law.

The additional technical features of Claim 9 are not recited in the description, and those skilled in the art can not get or generalize the technical solution of Claim 9 from the contents fully disclosed in the description. Accordingly, Claim 9 can not be supported by the description, and does not comply with the requirements of Article 26(4) of the Chinese Patent Law.

8. Claim 21 is rejected under Article 26(4) of the Chinese Patent Law.

The technical feature "a modulator that changes a voltage difference between said transmitter main electrode and said transmitter return electrode in response to data to be transmitted, said modulator changes the voltage difference in response to an electric signal corresponding to notification information to notify existence of said electric field communications apparatus" appearing in Claim 21 is not recited in the description, and those skilled in the art can not get or generalize the technical solution of Claim 21 from the contents fully disclosed in the description. Accordingly, Claim 21 can not be supported by the description, and does not comply with the requirements of Article 26(4) of the Chinese Patent Law.

9. Claims 1, 12, 14 and 22 do not comply with the requirements of Rule 20(1) of the Implementing Regulations of the Chinese Patent Law.

There are no antecedents for the term "said transmitter return electrode" appearing in line 8 of Claim 1, the term "said receiving apparatus" appearing in line 2 of Claim 12, the terms "said dielectric" and "said transmitter return electrode" appearing in Claim 14, the term "said transmitter apparatus" appearing in line 3 of Claim 22, the term "said transmitter main electrode" appearing in line 4 of Claim 22, and the term "said notification information" appearing in line 6 of Claim 22, thereby leading to unclear scopes for Claims 1, 12, 14 and 22.

***Rule 20(1) of the Implementing Regulations of the Chinese Patent Law: The claims shall define clearly and concisely the matter for which protection is sought in terms of the technical features of the invention or utility model.***

10. Claim 7 does not comply with the requirements of Rule 20(1) of the Implementing Regulations of the Chinese Patent Law.

There are terms "transmitter main electrode", "transmitter return electrode", "receiver main electrode" and "receiver return electrode" appearing in Claim 1, thus it is unclear which one the term "an electrode" appearing in Claim 7 means, thereby leading to an unclear scope for Claim 7.

11. Claim 11 does not comply with the requirements of Rule 20(1) of the Implementing Regulations of the Chinese Patent Law.

The technical feature "said receiver main electrode is provided in a location where said receiver main electrode does not contact said transmitter main electrode and said receiver main electrode" recited in Claim 11 has an unclear logic, since it is difficult to understand how the receiver main electrode can not contact the receiver main electrode. Therefore, Claim 11 has an unclear scope.

12. Claim 12 does not comply with the requirements of Rule 20(1) of the Implementing Regulations of the Chinese Patent Law.

The technical feature "said destination electrode and said return electrode is positioned to be opposite each other across said electro-optical crystal" recited in Claim 12 is unclear, thereby leading to an unclear scope for Claim 12.

13. Claims 18 and 19 do not comply with the requirements of Rule 20(1) of the Implementing Regulations of the Chinese Patent Law.

The technical feature "said measuring part is positioned nearer said electro-optical crystal than said receiver return electrode" recited in both of Claims 18 and 19 has an unclear logic, since Claim 14, to which Claims 18 and 19 refer, recites "said measuring part comprises an electro-optical crystal". Thus, it is unclear how the measuring part of the electro-optical crystal is positioned nearer said electro-optical crystal than said receiver return electrode, thereby leading to unclear scopes for Claims 18 and 19.

14. The title of the invention shall clearly, briefly and fully reflect the subject and type of the claimed invention. Thus, the title of the present application "ELECTRONIC COMMUNICATIONS SYSTEM, APPARATUS AND ELECTRODE LAYOUT METHOD" does not comply with such a provision, thus does not comply with the requirements of Rule 18 (1) of the Implementing Regulations of the Chinese Patent Law.

The applicant shall make a response by the due date specified in this Office Action, make explanations against all the issues mentioned in this Office Action one by one, amend the present application documents following the requirements of this Office Action, specifically amending the independent claims and dependent claims thereof according to the documents recited in this Office Action, and state out reasons for which the newly amended claims possess novelty and inventive step over the documents recited in this Office Action and the prior art before the date of filing mentioned in the description. Moreover, the applicant should make corresponding amendments to the description based on the amended claims. It shall be noted that the amendment to the application must comply with Article 33 of the Chinese Patent Law, i.e. shall not go beyond the scope of the disclosure contained in the initial description and claims.